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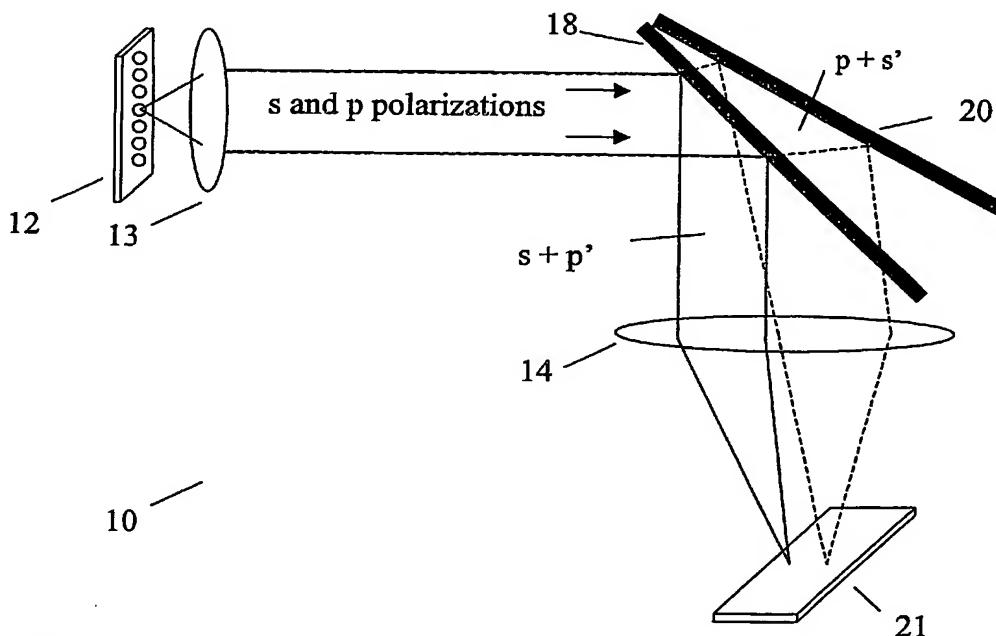
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(54) Title: POLARIZATION DETECTION



(57) **Abstract:** Disclosed is an optical device for receiving light having a wavelength between 400 nm and 680 nm. The device has a polarizing beam splitter (PBS) that comprises a substrate having a first and second surface, at least one of which being coated with a substantially parallel array of elongated conducting elements, wherein the PBS reflects light of a first polarity and transmits light of the opposite polarity; and a reflector positioned to reflect the opposite polarity light back through the PBS to the front surface, wherein the reflector does not substantially alter the polarity of light at any position. The device can be used to detect fluorescence polarization of a sample.

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